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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/574,433

Filing Date: April 03, 2006 Appellant(s): BIRD ET AL.

> Dicran Halajian For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/29/2009 appealing from the Office action mailed 04/29/2009.

Application/Control Number: 10/574,433

Art Unit: 2617

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

Page 2

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings

which will directly affect or be directly affected by or have a bearing on the Board's decision in

the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in

the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 6,980,083	Sako et al.	12-2005
US 6,130,602	O'Toole	10-2000
US 2003/0162556	Libes	08-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 6, 8-10, 22-24, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Libes (US PGPUB # US 2003/0162556 A1) herein after referred as Libes.

Consider claim 1, Libes discloses a method and system for communication between two wireless enabled devices that reads on a method of configuring a radio link between a first device and a second device (Libes: paragraph 31, line 1), each of the first device and the second device comprises radio means (Libes: paragraph 31, line 2), and wherein at least one of the first device and the second device comprises proximity detection means (Libes: Fig 1-3: device 2 & 4, paragraph 0032 lines [11-13]) and timing means, wherein said method comprises the acts of:

detecting proximity between the first device and the second device when the first device and the second device are within a predetermined distance of each other (Libes: Fig 9 & paragraph

Page 4

Art Unit: 2617

37, line [1-8] discloses the magnet and detector are specified for proximity detection, paragraph 48 and figures 23 and 24 discuss proximity timing intervals),

detecting a duration of the proximity of the first device and the second device to each other, and establishing the link in response to the duration exceeding a predetermined duration and the link is not already established (Libes: Fig 23 discloses listening for N milliseconds with 250<N<350 and creating a connection, hence detecting a duration of proximity & establishing link based on N).

Consider claim 6, Libes discloses the method as claimed in claim 1, further comprising the act of exchanging identifiers of the first device and the second device, wherein said identifiers are pre-installed radio identifiers (Libes: paragraph 32: lines [14-17] discloses transferred information includes security key or manufacturers' information).

Consider claim 8, Libes discloses the method as claimed in claim 1, further comprising the act of indicating a configuration status of the link (Libes: paragraph 45, lines[20-22]).

Consider claim 9, Libes discloses a system having devices including a first radio device and a second radio device comprising radio means operable to communicate via a configurable radio link there between (Libes: paragraph 31), and wherein at least one of said devices comprises proximity detection means for detecting proximity between the first radio device and the second radio device when said devices are within a predetermined distance of each other, and timing means for detecting duration of said proximity (Libes: Fig 23, 24 &

paragraph 48 disclose listening for N milliseconds with 250<N<350 and creating a connection, hence detecting a duration of proximity & establishing link based on N), and wherein said radio means (Libes: Fig 23) establish the radio link in response to the duration exceeding a predetermined duration and the radio link is not already established.

Consider claim 10, Libes discloses the system as claimed in claim 9, wherein said first and second device are adapted to physically connect with respective host apparatus (Libes: Fig 4: "mechanical components that physically interlock) and wherein said apparatus communicate with one another via said configurable radio link (Libes: paragraph 32 & Fig 1).

Consider claim 22, Libes discloses a method of configuring a radio link between a first device and a second device comprising the acts of:

detecting proximity between the first device and the second device when the first device and the second device are within a predetermined distance of each other (Libes: Fig 9 & paragraph 37, line [1-8] discloses the magnet and detector are specified for proximity detection,

paragraph 48 and figures 23 and 24 discuss proximity timing intervals);

detecting a duration of the proximity of the first device and the second device to each other; and establishing the radio link in response to the duration exceeding a predetermined duration

(Libes: Fig 23 discloses listening for N milliseconds with 250<N<350 and creating a connection, hence detecting a duration of proximity & establishing link based on N).

Consider claim 23, Libes discloses a system comprising: a first device (Libes: Fig

3:A); and a second device (**Libes: Fig 3:B)** for communicating with the first device via a radio link (**Libes: Fig 3:12 discloses device A communicating to device B)**;

wherein at least one of the first device and the second device comprises:

a proximity detector configured to detect proximity between the first device and the second device when the first device and the second device are within a predetermined distance of each other (Libes: Fig 9 & paragraph 37, line [1-8] discloses the magnet and detector are specified for proximity detection, hence proximity detector); and

a timer configured to detect duration of the proximity (Libes: paragraph 48 & fig: 23, 24 discuss proximity timing intervals, hence presence of timer);

wherein the radio link is established in response to the duration exceeding a predetermined duration (Libes: Fig 23).

Consider claim 24, Libes discloses a radio device operable to communicate via a radio link with a further device, the radio device comprising:

a proximity detector configured to detect proximity between the radio device and the further device when the radio device and the further device are within a predetermined distance of each other (Libes: Fig 9 & paragraph 37, line [1-8] discloses the magnet and detector are specified for proximity detection, hence presence of proximity detector);

a timer configured to detect duration of the proximity (Libes: paragraph 48 and fig:23, 24 discuss proximity timing intervals, hence presence of timer); and

a transceiver for establishing the radio link in response to the duration exceeding a predetermined duration (Libes: paragraph 32 lines [11-14] disclose transfer of handshaking data hence

presence of transceiver, further paragraph 48 and fig:23, 24 discuss listening for N milliseconds with 250<N<350, hence decision is based on value of N).

Consider claim 27, Libes discloses the radio device of claim 24, wherein the proximity detector comprises a reed switch and magnet (Libes: paragraph 38 and figure 10, item 404), the reed switch being activated by a further magnet of the further device with the further device is within the predetermined distance (Libes: Fig 1-3: device 2 & 4, paragraph 0032 lines [11-13]), wherein the reed switch is connected to the timer for determination of duration of activation of the reed switch and establishment of the radio link in response to the duration of activation exceeding the predetermined duration (Libes: Fig 23 discloses listening for N milliseconds with 250<N<350 and creating a connection, detecting a duration of proximity & establishing link based on N, hence there is a connection between reed switch and the timer).

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4, 5, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Libes.

Consider claim 4, Libes discloses the method as claimed in claim 1, wherein said predetermined duration is between substantially two and ten seconds (Libes: Figures 23 and 24 range from 100-350 milliseconds, which is less than 10 second, however it is a design choice of applicant to have that range between 2 and 10 second, which is not patentable). This claim is rejected for the motivation of providing more time to confirm trigger of radio link.

Consider claim 5, Libes discloses the method as claimed in claim 1, wherein said predetermined duration is about 2 seconds. (Libes: Figures 23 and 24 range from 100-350 milliseconds, however it is a design choice of applicant to have that range about 2 second, which is not patentable) Being adjustable these timer intervals also anticipate the larger interval

of 2 seconds. This claim is rejected for the motivation of providing more time to confirm trigger of radio link.

Page 9

Consider claim 25, Libes discloses the radio device of claim 24, wherein the proximity detector comprises a reed switch and magnet, the reed switch being positioned substantially perpendicular to magnetic field lines emanating from the magnet, wherein the magnet has insufficient field strength to operate the reed switch so that the reed switch is not operated by the magnetic field lines substantially perpendicular to the reed switch. It is obvious to one ordinary skilled in art to selecting the physical and magnetic orientations in mounting the magnet and reed relay switch. This claim is rejected for the motivation of using magnet property to activate/deactivate switch.

Consider claim 26, Libes discloses the radio device of claim 24, wherein the proximity detector comprises a reed switch and magnet, the magnet having sufficient field strength to operate the reed switch, wherein the reed switch is positioned substantially parallel to magnetic field lines emanating from the magnet so that the reed switch is not operated by the magnetic field lines substantially parallel to the reed switch. It is obvious to one ordinary skilled in art to selecting the physical and magnetic orientations in mounting the magnet and reed relay switch. This claim is rejected for the motivation of using magnet property to activate/de-activate switch.

Claims 11-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Libes as applied to claims above, and in view of Sako et al.(US Patent # US 6,980,083 B2)

herein after referred as Sako.

Consider claim 11, Libes discloses a radio device operable to communicate via a configurable radio link with a further device (Libes: paragraph 31), the radio device comprising proximity detection means for detecting proximity between the radio device and the further device when the radio device and the further device are within a predetermined distance of each other (Libes: Fig 1-3: device 2 & 4, paragraph 0032 lines [11-13]), timing means for detecting duration of said proximity (Libes: figures 23 and 24 and paragraph 37), and radio means for establishing the radio link in response to the duration exceeding a predetermined duration (Libes: Fig 23 disclose listening for N milliseconds with 250<N<350 and creating a connection, hence detecting a duration of proximity & establishing link based on N) and the radio link is not already established. However, Libes fails to specifically disclose the radio links is not already established, however the examiner maintains that it was well known in the art to provide the radio link is not already established as taught by Sako (Sako: Fig11: S25 & column 9 lines 1-11).

In a similar field of endeavor **Sako** discloses Radio communication system apparatus and method. In addition **Sako** discloses the radio link is not already established.

Therefore, it would have been obvious to one of ordinary skill in that art at the time the invention was made to modify **Libes** by specifically providing the radio link is not already established as taught by **Sako** for the purpose of saving power in portable device (**Sako: column 1 lines [62-65]**).

Application/Control Number: 10/574,433 Page 11

Art Unit: 2617

Consider claim 12, Libes in view of Sako discloses the radio device as claimed in claim 11, wherein said proximity detection means comprises a reed switch and magnet (Libes: paragraph 38 and figure 10, item 404). This claim is rejected for the same motivation as claim 11.

Consider claim 13, Libes in view of Sako discloses the radio device as claimed in claim 12, wherein said magnet has insufficient field strength to operate said reed switch and wherein said switch and magnet are arranged such that some of the magnetic field lines emanating from the magnet are perpendicular to the direction in which the switch closes. It is obvious to one ordinary skilled in art to selecting the physical and magnetic orientations in mounting the magnet and reed relay switch. This

Consider claim 14, Libes in view of Sako discloses the radio device as claimed in claim 12, wherein said magnet has sufficient field strength to operate said reed switch, and wherein said reed switch and magnet are arranged such that the magnetic field lines emanating from the magnet are substantially parallel to the direction in which the switch closes, this claim is rejected is for the same motivation as claim 12.

Consider claim 15, Libes in view of Sako discloses the radio device as claimed in claim 13, wherein said timing means comprises a micro-controller connected with said proximity detection means. This claim is rejected for the same motivation as claims 13 additionally because

Application/Control Number: 10/574,433

Art Unit: 2617

It is obvious to one ordinary skilled in art to have a micro-controller for implementing a communication device (Libes: paragraph 47 and 48).

Consider claim 16, Libes in view of Sako discloses the radio device as claimed in claim 15, wherein said radio means comprises a digital transceiver controlled by said micro-controller. This claim is rejected for the same motivation as claim 15 additionally because It is obvious to one ordinary skilled in art to have a digital transceiver for implementing a communication device (Libes: paragraph 48: 'individual processing system for wireless handshaking').

Consider claim 17, Libes in view of Sako discloses the radio device as claimed in claim 11, the device being further adapted to physically connect with a host apparatus and provide and receive data to and from said host apparatus. Claim 17 is rejected for the same motivation as claim 11 in addition (Libes: paragraph 41, lines [1]), and provide and receive data to and from said host apparatus along with Libes: paragraph 41, lines [2-6]).

Consider claim 19, Libes discloses the method of claim 1, further comprising the act of removing the link if the link is already established. However Libes fails disclose removing the link if the link is already established. However the examiner maintains that it was well known in the art to provide removing the link if the link is already established as taught by Sako (Sako: Fig 11 & column 9 lines [12-36] discloses method where it specifically checks if there is application ID present in the history mgmt table, if it is then it disconnects the link.)

In a similar field of endeavor Sako discloses Radio communication system apparatus and

method. In addition Sako discloses removing the link if the link is already established.

Therefore, it would have been obvious to one of ordinary skill in that art at the time the invention was made to modify **Libes** by specifically providing removing the link if the link is already established as taught by **Sako** for the purpose of saving power in portable device (**Sako:** column 1 lines [62-65]).

Consider claim 20, Libes discloses the system of claim 9, wherein said radio means remove the radio link if the radio link is already established. However Libes fails disclose removing the link if the link is already established. However the examiner maintains that it was well known in the art to provide removing the link if the link is already established as taught by Sako (Sako: Fig 11 & column 9 lines [12-36] discloses method where it specifically checks if there is application ID present in the history mgmt table, if it is then it disconnects the link.)

In a similar field of endeavor **Sako** discloses Radio communication system apparatus and method. In addition **Sako** discloses removing the link if the link is already established.

Therefore, it would have been obvious to one of ordinary skill in that art at the time the invention was made to modify **Libes** by specifically providing removing the link if the link is already established as taught by **Sako** for the purpose of saving power in portable device (**Sako:** column 1 lines [62-65]).

Consider claim 21, Libes discloses the system of claim 11, wherein said radio means remove the radio link if the radio link is already established. However Libes fails disclose

removing the link if the link is already established. However the examiner maintains that it was well known in the art to provide removing the link if the link is already established as taught by Sako (Sako: Fig 11 & column 9 lines [12-36] discloses method where it specifically checks if there is application ID present in the history mgmt table, if it is then it disconnects the link.)

In a similar field of endeavor Sako discloses Radio communication system apparatus and method. In addition Sako discloses removing the link if the link is already established.

Therefore, it would have been obvious to one of ordinary skill in that art at the time the invention was made to modify **Libes** by specifically providing removing the link if the link is already established as taught by **Sako** for the purpose of saving power in portable device (**Sako:** column 1 lines [62-65]).

Claim 7 is rejected under 35 U.S.C 103(a) as being unpatentable over Libes in view of O'Toole (US Patent # 6,130,602) herein after referred as O'Toole.

Consider claim 7, Libes in view of O'Toole discloses the method as claimed in claim 1, further comprising the act of exchanging identifiers of the first device and the second device (Libes: paragraph 32: lines [14-17] discloses transferred information includes security key or manufacturers' information), wherein said identifiers are randomly generated radio identifiers. However, Libes fails to specifically mention identifiers are randomly generated radio identifiers. However, the examiner maintains that it was well known in the to provide identifiers

Application/Control Number: 10/574,433

Art Unit: 2617

are randomly generated radio identifiers as disclosed by O'toole (O'Toole: Col. 45 line [61] – Col 46 line [7] discloses "the interrogator 26 sends a command causing each device 12 of a potentially large number of responding devices 12 to select a random number").

Page 15

In similar endeavor O'Toole discloses establishing of said link comprises exchanging randomly generated radio identifiers. In addition, O'toole discloses identifiers are randomly generated radio identifiers.

Therefore, it would have been obvious for one of an ordinary skill in communications circuitry design to combine this random identifier scheme with Libes. O'Toole's rationale is to allow multiple RF tags to automatically arbitrate their identities while in a clustered situation with multiple possible responding devices by selecting uniquely random identifier numbers 'to select a random number from a known range and use it as that device's arbitration number'.

(10) Response to Argument

Appellant's argues:

Regarding Claims 1, 6, 8-10, 22-24 and 27 are said to be unpatentable under 35 U.S.C. §102(e) over Libes on Appeal brief: page 14 ¶ 1 – page 16 ¶ 3 regarding "connection is not created in response to listening for N seconds for reception of data responsive to the transmitted handshake data" but rather the connection is created in response to reception of data and determination that a connection can be created".

Examiner's answer:

The examiner respectfully disagrees to Appellant's interpretation, as claims are given its broadest reasonable interpretation, here the prior art teaches that it waits for N seconds to determine if the connection is to be created (as agreed by the Applicant as well), the examiner interprets it to be creation of a connection in response to listening for N seconds for reception of data (checking if the data is received) responsive to the transmitted handshake data (Libes: Fig 23 & ¶ 0045 clearly disclose waiting for N milliseconds before checking for the reception of handshake data).

Appellant's argues:

Regarding prior art Libes failing to teach duration of proximity as Appellant claims on Appeal brief: page $17 \, \P \, 1$.

Examiner's answer:

The examiner respectfully disagrees as duration of proximity as Appellant discloses is "time, when first and second device are proximate" (Specification: page 1 lines [23-26]). Libes discloses, in Fig 23 & ¶ 0045, waiting for N seconds once the handshake data is sent and waiting for a response if the connection is to be created accordingly, which, the examiner interprets both as the same as that too is time when both the devices are proximate to each other.

Appellant argues:

Regarding prior art Libes failing to teach connection is created in response to N exceeding a predetermined duration on Appeal brief: page $17 \, \P \, 2$ – page $17 \, \P \, 4$.

Examiner's answer:

The examiner respectfully disagrees as Libes discloses in Fig 23 a decision to create connection if 250<N<350 and then it proceeds to create a connection, which is after the value of N exceeds the range 250 millisecond (predetermined time or duration).

Appellant's argues:

On page 18 ¶ 1 regarding prior art Libes failing to teach connection is simply not made "in response to the duration exceeding a predetermined duration and the link is not already established".

Examiner's answer:

Libes clearly teaches making connection in response to the duration exceeding 250 milliseconds and the link is not already established (this is an inherent scenario when every time the first link is getting created).

Appellant's argues:

On Appeal brief: page $18 \, \P \, 2$ – page $19 \, \P \, 2$ regarding Prior art Libes will keep on listening if the data is not received.

Examiner's answer:

The examiner agrees with the applicant's interpretation, however this feature of Libes is not a limiting feature as this is an additional check that Libes system is performing to make sure

Page 18

Appellant argues:

Regarding Claims 4-5, 25-26 are said to be unpatentable under 35 U.S.C. §103(a) over Libes & Claims 11-17 & 19-21 are said to be unpatentable under 35 U.S.C. §103(a) over Libes in view of Sako on Appeal brief: page 19 ¶ 2 – page 20 ¶ 2 & Claims 7 are said to be unpatentable under 35 U.S.C. §103(a) over Libes in view of O'toole on Appeal brief: page 20 ¶ 3 – page 20 ¶ 5 regarding "connection is not created in response to listening for N seconds for reception of data responsive to the transmitted handshake data" but rather the connection is created in response to reception of data and determination that a connection can be created"

Examiner's answer:

The examiner respectfully disagrees to Appellant's interpretation, as claims are given its broadest reasonable interpretation, here the prior art teaches that it waits for N seconds to determine if the connection is to be created (as agreed by the applicant as well), and then creating connection, hence the examiner's interpretation of creation of a connection in response to listening for N seconds for reception of data (after verifying if the data is received) responsive to the transmitted handshake data (Libes: Fig 23 & ¶ 0045 clearly disclose waiting for N milliseconds before checking for the reception of handshake data).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Application/Control Number: 10/574,433 Page 19

Art Unit: 2617

Appeals and Interferences section of this examiner's answer.

(12) Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Munjal Patel/

Examiner, Art Unit 2617

Conferees:

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Supervisory Patent Examiner, Art Unit 2617

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